

Appl. No.: 10/643,780
Amtd. dated 09/13/2006
Reply to Office action of June 14, 2006

REMARKS

This Amendment is filed in response to the Office Action dated June 14, 2006. Applicant notes with appreciation the Examiner's continued thorough examination of the application as evidenced by the latest Office Action. This Amendment amends Claims 1-6, 10-14, 19-26, and 28 and cancels claims 8, 13-18, 29, and 30. As such, the application now includes independent claims 1, 6, 10, 12, 19, 23, and 25. Applicant respectfully submits that all of the claims of the application are patentable and hereby requests reconsideration and allowance of the claims in light of the following remarks.

I. Claims 1-5, 10-11, 19-22, and 25-28 Are Patentable

On page 2, the Office Action rejects Claims 1-3, 5, 10-12, 14-16, 19, 20, 22-27, and 30 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,893,790 to Montgomery. The Office Action alleges that the '790 Montgomery reference discloses an apparatus made of polyethylene terephthalate, at least one structural member coupled to that material, and a valve to seal the chamber. The Office Action further alleges that the '790 reference discloses a sleeve that retains the structural member and is coupled to the flexible material. Applicant respectfully disagrees with these rejections.

Applicant has amended Claims 1, 10, 19, and 25 to include a sleeve associated with the flexible material that retains at least one structural member. The '790 patent does not disclose a sleeve or any other cavity that secures a structural member. The '790 patent simply discloses, at Col. 3 lines 57-61, Col. 4 lines 53-67, and in claim 1, a seam formed by sealing at least two panels of the polyethylene terephthalate material and covered by various adhesives. The '790 patent indicates that adhesives hide the unfinished appearance of the seam and serve as ballasts used to achieve neutral buoyancy. Also, at Col. 6 lines 49-62 and in claim 1, the '790 patent discloses that the seam maybe left uncovered and instead of using adhesive ballasts, buoyancy is controlled through the use of ballasts that clip onto the seam. Nowhere in the reference is there disclosed, explicitly or implicitly, any type of sleeve for retaining a structural member, as is recited in independent Claims 1, 10, 19, and 25.

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II. Claims 6, 7, and 9 Are Patentable

On page 3, the Office Action rejects Claims 4, 6-9, 13, 17, 18, 28, and 29 under 35 U.S.C. 103(a) as being unpatentable over the '790 patent. The Office Action alleges that the '790 patent discloses strips that are used for adding and removing individual weight. Applicant respectfully disagrees with these rejections.

Applicant has amended Claims 6, 7, and 9 to include a plurality of flexible strips that are heat welded to the flexible material and retain a structural member. The '790 patent, in Col. 3, lines 24-26 and in Fig 3, simply discloses that the light weight die-cut material is affixed to the balloon with adhesive strips. It does not disclose strips that are heat welded to the flexible material.

III. Claim 12 Is Patentable

On page 2, the Office Action rejects Claims 1-3, 5, 10-12, 14-16, 19, 20, 22-27, and 30 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,893,790 to Montgomery. The Office Action alleges that the '790 patent discloses at least one structural member coupled to the flexible material such that when the chamber is filled with gas to a known level, the apparatus is substantially neutrally buoyant under ambient conditions. Applicant respectfully disagrees with these rejections.

Applicant has amended claim 12 to include a structural member that both defines at least a portion of a shape of the chamber and also has a defined weight for making the apparatus neutrally buoyant without the need of additional ballasts or a valve to change the level of gas in the chamber. The '790 patent, at Col. 5 line 64 – Col. 6 line 7, discloses a light weight die-cut material of cardboard or laminated foam that serves as a structural element. However, unlike the structural member in the present invention the die-cut material is used in conjunction with concentric ballasts and a valve to control buoyancy. The light weight die-cut material disclosed in the '790 patent does not appear to either 1) define at least a portion of a shape of the chamber and 2) have a defined weight for making the apparatus neutrally buoyant without the need of

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additional ballasts or a valve to change the level of gas in the chamber, as is recited in independent Claim 12.

IV. Claims 23-24 Are Patentable

On page 2, the Office Action rejects Claims 1-3, 5, 10-12, 14-16, 19, 20, 22-27, and 30 under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,893,790 to Montgomery. Applicant has amended claim 23 to include a structural member having opposed ends and a body. The structural member is fed through strips or a sleeve and the opposing ends are connected together. The '790 patent simply discloses a light weight die-cut material of cardboard or laminated foam that serves as a structural element, it does not disclose a structural member with two ends that is fed through a strip or sleeve and connect at the ends.

CONCLUSION

In light of the amended claims and the remarks above, Applicant respectfully submits that Claims 1-5, 6, 7, 9, 10-11, 12, 19-22, 23-24, and 25-28, of the application are patentable. Applicant therefore respectfully requests that a Notice of Allowance be issued in the application.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required

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therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,



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2006.**

LEGAL02/30020639v1